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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,234	06/27/2003	Troy M. Watson	Pro SE	9500
7590		12/16/2004	EXAMINER DUVERNE, JEAN F	
TROY M. WATSON 7052 E 2nd ST. Tucson, AZ 85710		ART UNIT 2839		

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/609,234	<b>Applicant(s)</b> WATSON, TROY M.	
	<b>Examiner</b> Jean F. Duverne	<b>Art Unit</b> 2839	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12 and 14-22 is/are rejected.
- 7) ☒ Claim(s) 4 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/27/2003</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3, 5, 7-11, 14, 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Walup (US005167512A ).

Walup's device discloses an electrical interface assembly comprising: a housing panel comprising two electrically-conductive layers (36,38) separated by an insulating material (26), a through-opening (40) across opposite sides of the housing panel; an interface module disposed within the through-opening with a contact end (16a, 16b) facing each of said opposite sides of the housing panel; and connecting means for electrically connecting the interface module to said the electrically-conductive layers in the housing panel; wherein said opposite contact ends (16a, 16b) in said interface module are adapted to provide electrical interface on opposing sides of said housing panel; wherein said interface module provides an active element to influence a signal between said contact ends in a predetermined manner; wherein said electrical interface module includes a single-ended-signal interface module between said opposite sides of the housing; wherein an output from the single-ended-signal interface module is connected to an input of a second single-ended-signal (contact) interface modules through one of said conductive layers; wherein said interface modules comprises a

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single-contact end on one side of the housing panel and a two-contact end on the opposite side of the housing; wherein said electrical interface module includes a differential electrical interface module (inherent functional limitations); the active element or the electrical conductive material (36,38) as being deposited on the surface of the insulative material (26)

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6, 12, 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walup (US005167512A).

In regard to claims 6 and 12, Walup's device discloses the aforementioned limitations, but fails to explicitly disclose the two-contact end at the opposite side of the housing. It would have been obvious to one having ordinary skill in art at the time the invention was made to add an additional contact end, since it has been held that mere duplication of the essential working of a device involve only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. It would have been obvious to one having ordinary skill in art at the time the invention was made to add the additional contact end in order to improve the interconnection system in Walup's device.

In regard to claims 20-21, Walup's device discloses the aforementioned limitations, but fails to explicitly disclose the signal source as being an oscillator or temperature measuring device which is considered as a functional recitation and has not given patentable weight because it is narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specific function, as set forth in 35 USC § 112, 6<sup>th</sup> paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.d. 172; 388 O.G. 279. It would have been obvious to one having ordinary skill in art at the time the invention was made to have the signal source as being an oscillator or temperature measuring device in order to meet the system design and requirement in Walup's device.

Claims 2, 12, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walup (US005167512A ) in view of Linderman et al (US005167512A ).

In regard to claims 2, 15, Walup's device discloses the aforementioned limitations, but fails to explicitly disclose the electrically-conductive cap on one of the contact end. Linderman's device discloses the electrically-conductive cap (25, 26) on one of the contact end. It would have been obvious to one having ordinary skill in art at the time the invention was made to add the cap such as the one disclose in Linderman's device in order to improve the interconnection system in Walup's device. It would have been obvious to one having ordinary skill in art at the time the invention was made to

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add the cap such as the one disclose in Linderman's device in order to improve the interconnection system in Walup's device.

In regard to claim 12, Walup's device discloses the aforementioned limitations, but fails to explicitly disclose the housing with the multiple openings. Linderman's device discloses the housing with the multiple openings. It would have been obvious to one having ordinary skill in art at the time the invention was made to have the housing with the multiple openings such as the one disclose in Linderman's device in order to increase the size of Walup's device.

### ***Conclusion***

4. Claims 4 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Prior art fails to disclose the combination features the interconnection between the input and output signals through the conductive layer or the differential signal and the interface signal as being connected to additional interface module through separate traces in the conductive layers with the rest of the claims limitations.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean F. Duverne whose telephone number is (571) 272-2091. The examiner can normally be reached on 9:00-7:30, Monday-Thursday.

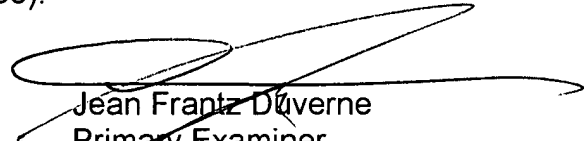
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JFD

11/30/2004



Jean Frantz Duverne  
Primary Examiner  
Art Unit 2839